

**Remarks/Arguments:**

Claims 1-5 are pending in the above-identified application. Claims 6 and 7 have been cancelled.

Claims 1-2, 4 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of JP Publication no. 11-50735 to Kajiyama, and JP Publication no. 2000-192939 to Katsuura et al. The rejection of claim 6 is moot due to the cancellation of this claim. With regard to claims 1-2 and 4, Applicants respectfully request reconsideration of this rejection.

With regard to claim 1, neither Kajiyama, Katsuura et al., nor their combination disclose or suggest,

... wherein each of the plurality of movable cams rotates from a partially open position to a predetermined angle more than 180° from the partially open position without the maximum height of the fixed cams reaching a maximum height of the respective movable cams.

Basis for this amendment may be found in the specification, for example, at page 13, lines 1-13 and Figures 4 and 5A-5C.

Applicant's gratefully acknowledge an interview granted by the Examiner on August 8, 2007. During the interview, it was agreed that the amendment proposed appears to overcome the rejection. In particular, the Examiner agreed Kajiyama, Katsuura et al., nor their combination appear to disclose or suggest "wherein each of the plurality of movable cams rotates from a partially open position to a predetermined angle more than 180° from the partially open position without the maximum height of the fixed cams reaching a maximum height of the respective movable cams."

Applicants' exemplary embodiment includes a fixed outer cam 22 and a movable outer cam 25. Movable outer cam 25 may rotate from a closed position to an open position and to a position beyond the open position. As shown in Figs. 4 and 5C, the outer movable cam 25 includes a gradual sloping portion (right hand side of protrusion) and a flat portion. The partially open position begins when the tip (maximum height) of fixed outer cam 22 is at the top of the ramp 25. The cam is in the open position when it moves from the gradual sloping portion to the flat portion. The open position may, however, continue further along the flat portion. As shown in Fig. 4, the point where the open position begins and the tip (maximum

height) of outer movable cam 25 are 180° from each other. Thus, a person of ordinary skill in the art would conclude that movable cam 25 may be rotated from a partially open position to a predetermined angle more than 180° from the partially open position without the tip of the fixed cam 22 reaching the tip of movable cam 25.

Kajiyama includes movable inner cams 61a and movable outer cams 91a. (Fig. 1). Kajiyama also includes fixed inner cams 32a and fixed outer cams 32a. (Fig. 1). The movable cams 61a and 91a in Kajiyama each reach a maximum height twice within their respective circumferences. (Fig. 2(a)-2(d)). Further, each of the movable cams 61a and 91a reach a maximum height at a point less than or equal to a rotation of 180 degrees. (Fig. 2(a)-(d)). Thus, Kajiyama does not disclose the features of claim 1.

In Katsuura et al., movable member 17 includes movable cams 55 and 62 each having the same maximum height. (Fig. 6). Fixed cam is in an open position at 0°. The tip of fixed cam 16 reaches the tip of movable cam 55 at about 160°. As movable member 17 is rotated 180° further, the tip of fixed cam 16 again reaches the same maximum height at the tip of movable cam 62 at about 340°. Thus, movable member 17 in Katsuura et al. does not rotate "...more than 180° from the open position without the maximum height of the fixed cams reaching a maximum height of the respective movable cams.

Because neither Kajiyama, Katsuura et al., nor their combination disclose or suggest the features of claim 1, claim 1 is not subject to rejection under 35 U.S.C. § 103(a) in view of Kajiyama and Katsuura et al. Claims 2 and 4 depend from claim 1. Accordingly, claims 2 and 4 are also not subject to rejection under 35 U.S.C. § 103(a) in view of Kajiyama, Katsuura et al.

Claims 3, 5 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Katsuura et al. and US. Patent no. 6,658,111 to Nagashima. The rejection of claim 7 is moot due to the cancellation of this claim. With regard to claims 3 and 5, Applicants respectfully request reconsideration of this rejection.

Claim 3, while not identical to claim 1, includes features similar to those set forth above with regard to claim 1. Thus, Katsuura et al. does not disclose or suggest the features of claim 3 for the same reasons as those set forth above. As described in the previous response, the structure of the Nagashima device does not allow for a set of fixed and movable cams corresponding to an outer camming device to be circumferentially around another set of fixed

and movable cams corresponding to an outer camming unit. Thus, Nagashima et al. also does not disclose or suggest the features of claim 3. Claim 5 depends from claim 3. Accordingly, claim 5 is also not subject to rejection under 35 U.S.C. § 103(a) in view of Katsuura et al. and Nagashima.

In view of the foregoing amendments and remarks, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1-5.

Respectfully submitted,

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